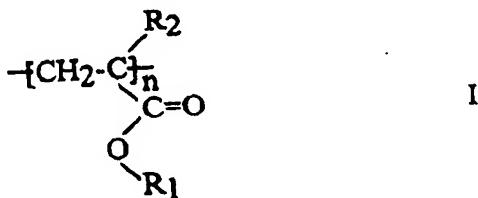


*C
cont.*
P2b

(c) a polymer matrix including a polymerizable resin adapted for use in an oral environment which contains at least one of 2,2-bis[4-(2-hydroxy-3-methacrylyloxypropoxy)phenyl]propane, ethyleneglycol dimethacrylate; triethyleneglycol dimethacrylate, and/or an urethane dimethacrylate resin; a filler, initiator, a coupling agent and, optionally, additional additives.

P2b
39
41 42. (New) A microwave curable composition suitable for a denture base according to claim 41, wherein said composition comprises (a).

P2b
40
42 43. (New) A microwave curable composition suitable for a denture base according to claim 40, wherein said composition contains at least one acrylic polymer containing repeating monomer units represented by the formula



P2b
P2b

wherein

P2b
R₁ represents a hydrogen atom, an alkyl group, a substituted alkyl group, a benzyl group, a hydroxy alkyl group, a cyclic hydrocarbon, an ether group,

R₂ represents a hydrogen atom, a halogen atom, an alkyl group, or a substituted alkyl group, and

n is an integer of two or more.

P2b
42
43 44. (New) A microwave curable composition suitable for a denture base according to claim 41, wherein *R₁* represents a hydrogen atom, an alkyl group, a cyclic hydrocarbon, a benzyl group, a hydroxy alkyl group, or an ether group.

P2b
41
45 45. (New) A microwave curable composition suitable for a denture base according to claim 41, wherein *R₂* represents a hydrogen atom, a halogen atom, or an alkyl group.

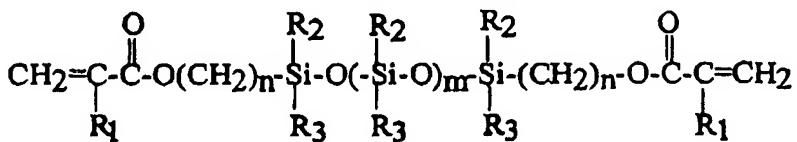
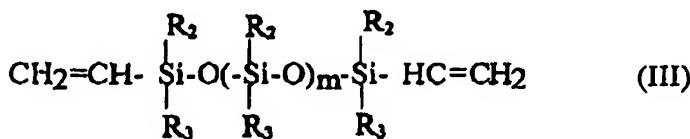
P2b
40
46 46. (New) A microwave curable composition suitable for a denture base according to claim 40, wherein said filler comprises an organic filler or an inorganic filler.

15
47. (New) A microwave curable composition suitable for a denture base according to claim

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41, wherein, wherein said composition comprises (b).

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48. (New) A microwave curable composition suitable for a denture base according to claim

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41, wherein said organopolysiloxane is represented by any of formulas (III), (IV) or (V)



wherein said formulas

m represents a value of 1 to about 6,000,

n represents an integer having a value of 1 to 6,

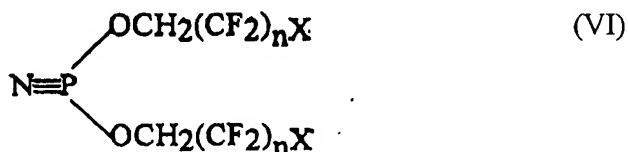
R₁ represents a hydrogen atom or an alkyl group,

R₂ represents an alkyl group of 1-6 carbon atoms, and

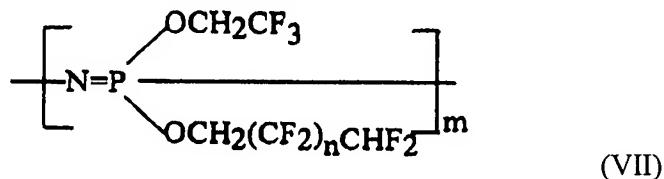
R₃ represents an alkyl group having 1-6 carbon atoms.

15
49. (New) A microwave curable composition suitable for a denture base according to claim

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41, wherein said composition comprises (b) and said at least one phosphonitrile fluoropolymer that is represented by formula (VI):



in which X represents a hydrogen atom or fluorine atom, n is a value of 1 to 11; or
 that has repeating monomer units represented by formula (VII):



in which n represents 3, 5, 7, 9 or 11 and m is from 10,000 to 50,000.

⁴⁸50. (New) A microwave curable composition suitable for a denture base according to claim ³⁹₄₁, wherein said composition comprises (c).

⁴⁹51. (New) A microwave curable composition suitable for a denture base according to claim ⁴⁸₅₀, wherein said initiator comprises at least one microwave sensitive compound.

⁵⁰52. (New) A microwave curable composition suitable for a denture base according to claim ⁴⁹₅₁, wherein said initiator comprises at least one member selected from the group consisting of benzoyl peroxide, dilauroyl peroxide, (tert-butyl) peroctoate, tert-butyl perbenzoate, 2,4-dichlorobenzoyl peroxide and 4,4-dichlorobenzoyl peroxide.

⁵¹53. (New) A microwave curable composition suitable for a denture base according to claim ⁴⁹₅₁, wherein said composition contains 0.05% to 1.0% by weight of said initiator.

⁵²54. (New) A microwave curable composition suitable for a denture base according to claim ⁴⁸₅₀, wherein said coupler comprises gamma-methoxypropylene silane or a thiomethacrylate.

⁵³55. (New) A microwave curable composition suitable for a denture base according to claim ⁴⁹₅₁, wherein (a) further comprises an amine accelerator.

⁵⁴56. (New) A microwave curable composition suitable for a denture base according to claim ³⁹₄₁, wherein said filler comprises particles having a particle size in the range of 0.04 to approximately 10 micrometers.

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57. (New) A method for forming a hardened object comprising

(i) forming a hardenable dental composite from a microwave curable composition, or applying a microwave curable resin matrix to a tooth; and

(ii) obtaining said hardened object by applying microwave energy to harden said composite or cure said resin matrix.

56

58. (New) A method according to claim 57, wherein said composite is a dental prosthetic or orthopedic element.

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59. (New) A method according to claim 57, wherein said composite is a dental prosthetic and in (ii) the hardening is intra-oral using a hand-held microwave applicator.

58

60. (New) A method according to claim 57, wherein said dental prosthetic is a composite filling, a crown, a bridge, an inlay, an overlay, a facing, a veneer or orthodontic appliance.

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61. (New) A method according to claim 57, wherein said microwave curable composite are according to claim 20.

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62. (New) A method according to claim 57, wherein in said method a hand-held microwave applicator is used in curing said resin matrix.

See Appendix